Wyoming Grade 6

# FlyBy Math<sup>TM</sup> Alignment to Wyoming Mathematics Content and Performance Standards Adopted July 7, 2003

## **Content Standard 1: Number Operations and Concepts**

Students use numbers, number sense, and number relationships in a problem-solving situation.

#### **Benchmark**

4. Students explain their choice of estimation and problem-solving strategies and justify results when performing number operations in problem-solving situations.

## FlyBy Math<sup>TM</sup> Activities

- --Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
- --Predict outcomes and explain results of mathematical models and experiments.

## **Content Standard 2: Geometry**

Students apply geometric concepts, properties, and relationships in problem-solving situations.

#### **Benchmark**

4. Students communicate the reasoning used in identifying geometric relationships in problem-solving situations appropriate to grade level.

## FlyBy Math<sup>TM</sup> Activities

--Explain and justify solutions regarding the motion of two airplanes using the results of plotting points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system.

#### **Content Standard 3: Measurement**

Students use a variety of tools and techniques in measurement in a problem-solving situation.

#### **Benchmark**

1. Students apply estimation and measurement of length to content problems and express the results in metric units (centimeters and meters).

### FlyBy Math<sup>TM</sup> Activities

--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

## **Content Standard 4: Algebra**

Students use algebraic methods to investigate, model, and interpret patterns and functions involving numbers, shapes, data, and graphs in a problem-solving situation.

#### **Benchmark**

1. Students recognize, describe, extend, create, and generalize patterns by using manipulatives, numbers, and graphic representations, including charts and graphs.

## FlyBy Math<sup>TM</sup> Activities

--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

- 2. Students apply knowledge of patterns to describe a constant rate of change when solving problems.
- --Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
- --Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

## **Content Standard 5: Data Analysis and Probability**

Students use data analysis and probability to analyze given situations and the results of experiments.

#### **Benchmark**

1. Students systematically collect, organize, and describe/represent numeric data using line graphs.

# FlyBy Math<sup>™</sup> Activities

- --Conduct simulation and measurement for several aircraft conflict problems.
- --Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.